

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



NEW BIRDS FROM ASIA, CHIEFLY FROM INDIA.

BY WALTER KOELZ.

While engaged in botanical pursuits in India and Afghanistan during the years 1936-1938, I had opportunity to make a collection of birds. On the basis of the study of these specimens, I am describing the following forms as new.

I am obligated to the authorities of the American Museum of Natural History, Field Museum of Natural History, Museum of Comparative Zoology, University of Michigan Museum of Zoology, and the U. S. National Museum, and to Mr. H. B. Conover, and to Mr. Hoyes Lloyd through the National Museum of Canada for the loan of specimens. I am especially indebted to the staff of the American Museum of Natural History and of the University of Michigan Museum of Zoology for privileges and assistance while studying their large and important collections. To Doctor Pierce Brodkorb, Doctor Ernst Mayr, and Doctor Josselyn Van Tyne, of these institutions, I am grateful for advice.

Unless otherwise indicated, the specimens on which the descriptions are based are in my collection.

Parus major stupae, new subspecies.

Type.—♂ (wing 66 mm.), collected at Sanchi, Bhopal, on January 2, 1938, by W. Koelz.

Topotypes.—3 specimens collected at about the same time.

Compared with specimens of *mahrattarum* from Ceylon in the Rothschild Collection this form differs in having shorter wing and tail, in having the outermost rectrices nearly all white, in having less extensive black on the throat and belly. The underparts are also whiter.

Compared with *nipalensis* from northern and eastern Bengal in my collection, the general tone is paler, especially on the sides. The central rectrix has much less blue-grey, the penultimate rectrix has much more white (the outer web is all white), the nuchal patch is more conspicuous.

Whistler (J. B. N. H. S. XXXV, p. 519), has shown that *cinereus* of Java differs from *nipalensis*. From an examination of Javan specimens in the Rothschild Collection, I find the bill of Javan birds is frailer, the nuchal patch whiter, and the black of the belly has a white edging.

Wing measurements:

stupae 2 ♂ 65.5, 66; 2 ♀ 62.5, 63 mm.

nipalensis 7 ♂ 60.5-64; 3 ♀ 60-63.5.

Whistler gives 5 ♂ 67-68; 2 ♀ 62.5, 65 mm.

cinereus 5 specimens 63-68 mm.

***Parus major meinertzhageni*, new subspecies.**

Type.—Male (wing 69 mm.), collected at Balkh, Afghanistan, on November 28, 1937, by W. Koelz.

Paratypes.—One specimen from Tashkurghan on September 4, 1937; 8 from the type locality on September 18 and 19, 1937, and 6 from November 28 to 30, 1937.

Compared with specimens of *ziaratensis* in my collection from Kandahar and Herat, this form is paler and the wing is shorter. The two central rectrices are nearly entirely blue-grey.

Compared with specimens of *bokharensis* in the Rothschild Collection, the back lacks the sandy cast, is bluer; the wing bar is duller and the black of the throat is deeper.

Compared with specimens of *feraghensis* and *iliensis* in the Rothschild Collection this form has a shorter wing and tail and the sides are paler.

A series of specimens that I took at Rustak near the Russian border are much like *feraghensis*. The juveniles, unlike neighboring *caschmirensis*, have little green in the plumage.

Wing measurements:

meinertzhageni, 9 ♂ 64.5-69 (71); 6 ♀ 63.5-66 mm.

ziaratensis, 8 ♂ 70-76; 9 ♀ 66.5-70 (73) mm.

bokharensis, ♂ 63-70 mm.

feraghensis, ♂ 68-77 mm.

iliensis, ♂ 68-74 mm.

} ex Hartert, V.P.F., 2, 1933, p. 176-7.

***Parus major decolorans*, new subspecies.**

Type.—♂ (wing 78 mm.), collected at Jalalabad, Afghanistan, on December 18, 1937, by W. Koelz.

Paratypes.—5 specimens taken in the type locality at about the same time; 2 from Daulatshah, Afghanistan, on June 1, 1937, and two from Paetak, on June 4, 1937.

This form is different from *ziartensis* in that the light of the under parts is very smoky and the back is darker. It differs from *caschmirensis*, from Gilgit, Kashmir Vale, Baltistan, and Ladakh, in being smoky on the under parts, white being virtually absent, the innermost rectrix is more black, and the tail is shorter.

Strangely, specimens in fresh fall plumage from Lahul, Punjab, are nearly as discolored below.

Wing measurements:

decolorans 6 ♂ 73.5–78; 4 ♀ 70–72 mm.
ziaratisensis 8 ♂ 70–76; 9 ♀ 66.5–70 (73) mm., Herat and Kandahar;
 7 ♂ 73–78; 2 ♀ 70.5–71.5 mm., ex Whistler, J. B. N. H. S. XXXV,
 p. 518.

***Machlolophus xanthogenys xanthonotus*, new subspecies.**

Type.—Adult ♂ (wing 74.5 mm.), taken at Londa, Bombay Presidency, on January 10, 1938, by W. Koelz.

Topotypes.—12 specimens taken from January 7 to March 10, 1938.

I have in my collection 7 specimens of *aplonotus* from Bhopal State and Mahendra Giri, Orissa, and of *travancoreensis* from Palni Hills. The new form is nearly as yellow as *aplonotus*. The light tips of the wing coverts are often conspicuously yellowish. In respect to other distinctive characters: large size, reduced white tips on the rectrices, extension forward of the supercilium, it is like *travancoreensis*.

Wing measurements:

xanthonotus 8 ♂ 74.5–79.5; 5 ♀ 70–74 mm.
aplonotus 5 ♂ 70–74; 2 ♀ 74, 75 mm.
 ♂ 70.5–77 mm. (ex Whistler).
travancoreensis 2 ♂ 75, 78; ♀ 74 mm.
 ♂ 76.5–82.5 mm. (ex Whistler)

I follow Whistler (J. B. N. H. S. XXXV, p. 520) in not accepting Blyth's name *jerdoni*.

***Sitta frontalis simplex*, new subspecies.**

Type.—♂ (wing 77.5 mm.) taken at Londa, Bombay Presidency, on January 31, 1938, by W. Koelz.

Topotypes.—Ten specimens taken from January 9 to March 10, 1938.

Compared with specimens of *frontalis* from Ceylon in the Rothschild Collection, these Indian specimens are less richly colored and without the strong lilac purple tone that characterizes the typical form. There are no significant size differences.

Compared with specimens of *corallina* in my collection and in the Rothschild Collection, the wing is longer. [Whistler (B. N. H. S. J., XXXV, p. 523) recognizes *corallina* on size only.]

Wing measurements:

*simplex*¹ 10 ♂ 74–82; 10 ♀ 72–76.5 mm.
corallina 8 ♀ 72–76.5; 4 ♀ 70–72 mm., ex Whistler, partim.

***Aegithina tiphia septentrionalis*, new subspecies.**

Type.—♀ (wing 66.5 mm.) taken at Bhadwar, Kangra District, Punjab, 2000 feet altitude, on April 13, 1933, by W. Koelz, U. M. M. Z., No. 78871.

Topotypes.—4 specimens taken March 31 to April 13, 1933. None have black in the body plumage.

Compared with specimens of *tiphia* from Dacca and the Sevok Forest

¹ Including specimens from the Nilgiris, the Palnis, and Southern Orissa.

near Darjeling, these specimens are much yellower on the crown and on the rest of the upperparts, more gold on the throat and upper breast. The outermost rectrices often have broad edges of yellow and the black inner rectrix of males is washed broadly on the distal end with green-yellow. The bill averages larger and the wing longer.

Wing measurements:

septentrionalis 4 ♂ 66.5-68; ♀ 66 mm.

tiphia 4 ♂ 63.5-65.5; 3 ♀ 63-65.5 mm.

***Hypocolius ampelinus orientalis*, new subspecies.**

Type.—Adult male (wing 106 mm.), taken at Kandahar, Afghanistan, on October 23, 1937, by W. Koelz.

Topotypes.—5 specimens, taken October 21-24, 1937.

Compared with specimens in the Rothschild Collection from Fao, which may be considered the type locality of *ampelinus*, my specimens are darker above, especially on the crown where in males there is a distinct bluish cast; they have a smaller bill and longer wing.

Wing measurements:

orientalis 4 ♂ 103-106; 2 ♀ 96, 100 mm.

ampelinus 5 specimens 97-103 mm.

***Molpastes leucotis farahensis*, new subspecies.**

Type.—♂ (wing 90.5 mm.), taken at Farah, Afghanistan, October 30, 1937, by W. Koelz.

Paratypes.—A specimen from the type locality on the same date; 7 specimens from Kandahar on October 17-22, 1937.

Differs in color from *mesopotamia* and typical *leucotis* of Sind, by being greyer, not sandy, above and below, and with more black, less brown, in the tail. In the matter of wing size it is intermediate. The tail is longer than in *leucotis*.

Wing measurements:

farahensis 4 ♂ 90-91.5; 5 ♀ 84-88 mm.

mesopotamia ♂ 90-95; ♀ 87-89 mm., ex Hartert, V. P. F. III, 1921-22, p. 2133.

leucotis 8 ♂ (75) 83-84.5 (87) mm., Sind specimens.

Tail measurements:

farahensis 3 ♂ 76-80; 4 ♀ 76-80 mm.

leucotis 8 ♂ 66-77 mm.

***Iole icterica intensior*, new subspecies.**

Type.—Male (wing 94.5 mm.), taken at Kunjapani, Nilgiri Hills, on February 20, 1937, by W. Koelz.

Paratypes.—2 specimens taken at about the same time in the type locality, and one from Kodaikanal, Palni Hills, on March 15, 1937.

Compared with specimens in my collection from Londa, which is between the type locality of *icterica* (Mahableshwar) and the Nilgiris, this form is richer in color, especially on the sides of the head.

Wing measurements:

intensior, ♂ 88.5, 94.5, 94.5; ♀ 90 mm.;
icterica 10 ♂ (90) 93–96; 4 ♀ 88.5–90.5 mm.

***Certhia himalayana cedricola*, new subspecies.**

Type.—Adult ♀ (wing 67 mm.), collected at Jalalabad, Afghanistan, on December 18, 1937, by W. Koelz.

Paratypes.—3 specimens from the type locality on the same date; one from Kail on June 3, 1937, and from Ferajghan Pass, June 6, 1937; 3 from Sirotai in mid-June, 1937.

Compared with specimens of *limes* from Gilgit in the Rothschild Collection, this form has greyer upper parts. The red-brown of the back is much reduced and duller, and the buff of the underparts is much paler.

Compared with specimens of *taeniura* from Turkestan in the Rothschild Collection, the upper parts are much darker. The under parts are also darker, especially the belly.

Wing measurements: 5 ♂, 69–72.5; 5 ♀, 65–67 mm.

***Cinclus pallasii kargasiensis*, new subspecies.**

Type.—Adult ♂ (wing 106 mm.), taken on Kargasi Pass, Afghanistan, August 8, 1937, by W. Koelz.

Paratypes.—5 specimens taken in the type locality at the same time; one from Sanglech, July 26, 1937; one from Minjan Pass, July 28, 1937; one from Paghman, Afghanistan, June 27, 1937; and one from Upper Tale Valley, Baltistan, August 24, 1936.

Compared with specimens of *tenuirostris* in my collection and that of the University of Michigan, mostly from Punjab, these Afghan specimens are duller, more hair-brown, but not so dark as typical *pallasii*. Juveniles average greyer and paler, especially on the breast. The wings and tail are longer.

Measurements:

kargasiensis adult ♂ 100.5, 103 (worn); 102 (worn); 105; juvenile ♂ 103+, 104.5; 3 adult ♀ 95–97.5; juvenile 97.5 mm.
tenuirostris, 15 ♂ 96–100 (103); 4 ♀ 91–95 mm.

***Saxicola caprata rupchandi*,¹ new subspecies.**

Type.—Adult female (wing 69.5 mm.) taken at Londa, Bombay Presidency, January 21, 1938, by W. Koelz.

Topotypes.—7 ♂ W 68–75; 7 ♀ 68–71 mm., taken from January 8 to March 12, 1938.

Like the races *atrata* and *burmanica*, this form has the white of the under parts confined to the lower abdomen in the male. Compared with Ceylonese *atrata* in the Rothschild Collection, this form has shorter wings and tail, heavier feet, and smaller bill. The color of the males is more black (no trace of brown), and the females are more black (less rufous brown) above and below.

¹ Named for the Thakur Rup Chand, without whose help I could not have collected birds.

Compared with *burmanica* from Benghal, Bhamo, and Hospet, which recent writers consider synonymous with typical *caprata*, the female is darker and less rufous throughout. Males are purer black with no trace of brown. There are no size differences.

The form is apparently resident. Breeding begins in late January. No migrant forms were collected.

A comparison with specimens in my collection from the Palni Hills (♂ 81, 2 ♀ 73.5, 74 mm.), Nilgiris (2 ♂ 76, 3 ♀ 72, 72.5, 74 mm.), and from Tellicherry (2 ♀ 69 mm.) indicates that the hill forms are nearest *atrata*. The Malabar females are colored like the hills female, but average smaller in the four measurable characters enumerated. The bill is heavier than in any Londa female.

***Oenanthe isabellina kargasi*, new subspecies.**

Type.—Adult ♀ (tail 62 mm.), in fresh fall plumage, taken August 8, 1937, on Kargasi Pass, Afghanistan, by W. Koelz.

Paratypes.—2 adults and three first plumage specimens in the type locality at about the same time; a juvenile from Zebak on July 22, 1937; 2 adults and a juvenile from Minjan Pass, July 26–28, 1937, and an adult from Teshkan Pass, August 13, 1937.

The new form differs from juveniles and adults of *isabellina* from South Afghanistan (Gardez) in my collection and from many specimens in the Rothschild Collection from North Africa, Asia Minor, Turkestan, Mongolia, in having heavier bill, longer tail, tarsus and toes, and deeper color.

***Cercomela fusca ruinarum*, new subspecies.**

Type.—Adult male (wing 94.5 mm.), taken at Sanchi, Bhopal State, on January 3, 1938, by W. Koelz.

Topotypes.—3 specimens taken on January 1 and 3, 1938.

Compared with specimens of *fusca* in the Rothschild and University of Michigan collections from Lahore and Hissar District, both in the Punjab,¹ these birds are much darker in color. The wing averages longer.

Wing measurements:

ruinarum 3 ♂ 90–95; ♀ 87 mm.

fusca 2 ♂ 88–90; 3 ♀ 84.5–87 mm.

***Saxicoloides fulvicata lucknowensis*, new subspecies.**

Type.—Adult male (wing 71 mm.), taken at Lucknow, U. P., on December 10, 1936, by W. Koelz.

Topotypes.—3 specimens taken on about the same date.

The races *fulvicata*, *intermedia*, and *pymnatura* occurring in the southern part of the Peninsula have the back predominantly black, and this form need therefore be compared only with the two northern forms *munda* and *cambaiensis*. Comparing males, this form differs from *munda* in being paler and much more grey, less rufescent, with crissal chestnut paler and with shorter wing and tail. Females are greyer throughout and have the same size differences.

¹ The type locality of *fusca* is Muttra.

Compared with specimens of *cambaiensis* from the Sind in the University of Michigan Collection and from Udaipur in my collection, the male of *lucknowensis* is greyer and paler above and wings and tail are shorter. Females differ in about the same way.

Wing measurements:

lucknowensis 2 ♂ 72, 73; 2 ♀ 67, 72 mm.

cambaiensis 7 ♂ 76-80; 4 ♀ 72-73 mm.

munda, 5 ♂ 72-77; 2 ♀ 73, 74.5 mm.

***Saxicoloides fulicata stuartbakeri*, new subspecies.**

Type.—Breeding ♂ (wing 73 mm.), taken at Bodhgaya, Bihar, on April 10, 1937, by W. Koelz.

Topotypes.—3 specimens taken at about the same time.

This form, like *lucknowensis*, has a short wing and tail and brown back. Comparing males, the color above is deeper and browner than in that form. It is darker than *munda* and more rufescent than *cambaiensis*, especially on the head. Color differences between females are slight.

Wing measurements: 2 ♂ 71, 73; 2 ♀ 69, 70.5 mm.

***Turdus merula brodkorbi*, new subspecies.**

Type.—Breeding female (wing 136 mm.), collected at Farakar, Afghanistan, July 6, 1937, by W. Koelz.

Paratypes.—Male and 3 females from Kandahar, October 21-23, 1937; a female from Bala Murghab, November 15, 1937, and one from Maimana, November 16, 1937; and two females from Balkh, November 30 and December 3, 1937.

Compared with females of the race *intermedia* from Turkestan in the Rothschild Collection and in the U. S. National Museum, these birds are not so brown above or below. The belly especially is greyer.

The race differs from *syriaca* in having much less brown. In *syriaca* the females are hair-brown above, with often an olive tint, and often nearly monochrome below, while the black of the male shows some brown.

Wing measurements: ♂ 135; 8 ♀ 127-137 mm.

***Prunella strophiatus sirotensis*, new subspecies.**

Type.—Adult ♂, taken at Sirotai, Afghanistan, on June 17, 1937, by W. Koelz.

Topotype.—Adult ♀, taken next day.

Wing measurements of both, 65 mm. Compared with topotypical *jerdoni* in my collection taken in Kashmir during summer of 1936, this race is greyer above, especially on the back and rump. The wing may average shorter. Wing measurements of topotypical *jerdoni*, 5 ♂, 66-71 mm.; 9 ♀ W 64-68.5 mm.

***Muscicapa strophiata euphonia*, new subspecies.**

Type.—Male (wing 74 mm.), taken at Kulu, Kangra Dt., Punjab, on December 25, 1932, by W. Koelz.

Paratypes.—One specimen from the type locality taken on December 25, 1932; one from Arsu, Punjab, on November 15, 1933; three from Chaura, Rampur State, Simla Hills, on November 3 and 4, 1933; 9 from Serahan, Rampur State, from November 5–8, 1933.

Compared with a series of *strophciata* in my collection from Darjeling, taken in the winter, this race is generally paler, except for the throat. The edgings of the large wing feathers are especially brighter.

***Hypothymis azurea similis*, new subspecies.**

Type.—Adult male (wing 68.5 mm.), taken at Londa, Bombay Presidency, on January 10, 1938, by W. Koelz.

Topotypes.—16 specimens taken from January 10 to March 6, 1938.

In coloration, duller than any Indian form. Compared with *sykesi* from Vizagapatam District and from the Nilgiris in my collection, the blue is duller (in females, less extensive below), and the light of the underparts greyer. The black band of the upper breast in males is but weakly developed, and the occipital spot is smaller.

Whistler (J. B. N. H. S. XXXVI, p. 91) rejects *sykesi*, but my specimens of *styani* from Dacca and those in the Rothschild Collection from Hainan have a much longer tail than any I have seen from peninsular India. The coloring may average richer.

Ceylonensis in the Rothschild Collection is more purplish and has the pectoral bar absent or obsolescent in males.

Wing measurements:

similis, 10 ♂ 65–70.5; 7 ♀ (62) 66–70 mm.

styani, 7 ♂ 69.5–74; 5 ♀ 66–69 mm. (Ex Whistler).

sykesi, 8 ♂ (64) 68–73; 3 ♀ 68–71 mm.

ceylonensis, 6 specimens 65.5–67 (70.5) mm.

***Chelidorhynch hypoxantha noa*, new subspecies.**

Type.—♀ (wing 57 mm.) collected at Naggur, Kulu, Punjab, on October 28, 1936, by W. Koelz.

Paratypes.—12 specimens from the type locality taken in December of 1932 and 1933; 2 from Baijnath, also in the Kangra Dt., Punjab, January 14, 1933; one from Chaura, Rampur State, Simla Hills, November 2, 1933; four from Serahan, Rampur State, November 5 and 6, 1933.

Compared with specimens from Sikkim in the Rothschild Collection this race shows somewhat paler on the back, primaries, and rectrices. The white wing-spots average larger and the yellow below is less tipped with smoky.

***Leucocirca albicollis canescens*, new subspecies.**

Type.—Male (wing 80.5 mm.), taken at Bhadwar, Punjab, March 31, 1933, by W. Koelz.

Topotypes.—Nine specimens taken between March 27 and April 19, 1933.

Wing measurements: 6 ♂ 77–81; 4 ♀ 74–76 mm.

Compared with Bengal specimens (Sukna Forest), the northwestern

specimens are ashy on the back, breast, and belly, not sooty, and the light tips to the rectrices are less sharply demarcated.

Hemipus picatus insulae, new subspecies.

Type.—American Museum of Natural History No. 655585, Wavenden, Ceylon, February 8, 1881, H. J. Elwes Coll.

Paratypes.—Six specimens from Ceylon in the same collection.

Differs from typical *picatus* from the Nilgiris, the Palnis, and Londa, Bombay Presidency, in having the white tip of the outermost tail feathers shorter.

All these specimens have a black back and it may be that the females are like the males in color, as has been suggested.

Tephrodornis pondiceriana warei,¹ new subspecies.

Type.—Adult male (wing 89.5 mm.), taken at Londa, Bombay Presidency, on January 12, 1938, by W. Koelz.

Topotypes.—11 specimens taken between January 11 and March 6, 1938.

Whistler (J. B. N. H. S. 38 p. 310) is right in saying that the birds of the western Ghats and the eastern provinces are darker. The Sikkim and Bengal birds of my collection and those in the Rothschild Collection are dark. They are the darkest and greyest of the Indian races. Compared with *pondiceriana* from the Punjab they are much darker and have less white on the throat. The white is present usually as streaks over the grey. Hodgson's name *leucurus* is probably available for this form.

The Londa birds are dark like *leucurus* but the cast is brown, and the crown is usually darker than the back. Compared with *pondiceriana*, the breast is also darker and the white of the throat is perhaps less extensive.

I have three adults from Mangalore on the Malabar Coast that are in rather worn plumage, but they appear to be like this form.

Compared with the Ceylonese race *affinis*, the tail and wings in *warei* are longer and the supercilium is more conspicuous.

Wing measurements: 9 ♂ 85–91; 4 ♀ 82.5–87 mm.

Birds taken in early March were breeding.

Pericrocotus cinnamomeus sidhoutensis, new subspecies.

Type.—Adult ♂ (wing 67.5 mm.), taken at Sidhout, Madras Presidency, March 23, 1937, by W. Koelz.

Paratypes.—3 specimens from the type locality at about the same time; 2 from Kodur nearby, on March 18, 1937.

In the distribution and intensity of red this form is intermediate between the richly colored, typical race of Ceylon (not *malabaricus* of Malabar, which is the most intensely colored of all races), and the two pale races, *iredalei* of Punjab and *pallidus* of Sind.

Compared with the typical race, the back and throat are paler and the wing shorter.

¹ Named for my friend S. J. Ware.

Compared with *pallidus*, the smallest of the named Indian races, which it most resembles, the coloration everywhere is deeper and the tail is shorter.

Vividus, of which I have seen examples in the Rothschild Collection from Rangoon, Upper Burma and the Shan States, appears to differ from the typical Ceylon form chiefly in having the throat grey.

Wing measurements:

sidhoutensis, 4 ♂ 65-67; 2 ♀ 65, 65.5 mm.

cinnamomeus, 8 ♂ 68.5-71; 6 ♀ 68-71.5 mm.

(Specimens from Londa, Bombay Presidency, Nilgiri Hills, Ceylon.)

iredalei, 6 ♂ 66.5-72; 7 ♀ 66-70 mm.

(Specimens from Punjab.)

pallidus, 8 ♂ 64-68 (70); 2 ♀ 63, 66 mm.

(Specimens from Sind.)

Tail measurements:

sidhoutensis, 4 ♂ 66-69.5; 2 ♀ 64, 70 mm.

pallidus, 8 ♂ 69-72.5 (76.5); ♀ 74 mm.

Two pairs taken at Sanchi, Bhopal State, are like *sidhoutensis* in color but are larger (2 ♂ 69, 71; 2 ♀ 69, 71 mm.).

***Chibia hottentota londae*, new subspecies.**

Types.—♂ (wing 166 mm.) collected at Londa, Bombay Presidency, on January 24, 1938, by W. Koelz.

Topotypes.—11 specimens taken from January 16, to February 20, 1938, by W. Koelz.

Compared with topotypical *hottentota* in my collection from near Darjeling, Bengal, and in the Rothschild Collection from Sikkim, the wing and tail of this form are shorter, the bill averages smaller, and the general color is duller.

Wing measurements: *londae*, 4 ♂ 165.5-166; 9 ♀ 153-161 mm.

I follow Whistler (J. B. N. H. S. XXXVI, No. 2, 1933, p. 352) in retaining Sikkim as the type locality of *hottentota*.

THE FORMS OF *Orthotomus sutorius* IN PENINSULAR INDIA.

Orthotomus sutorius sutorius (Pennant).

The type locality of *sutorius* is Ceylon, from whence I have seen specimens in the Rothschild Collection. My specimens from the Nilgiris (February) match these specimens closely. This form has the back a clear yellow-green, more yellow than any of the other Indian races. The color of the forehead generally spreads to the nape. There is no supercilium. The ear coverts are pale, washed with buff. The wing, 6 ♂ 46.5-51.5 mm.

***Orthotomus sutorius londae*, new subspecies.**

Type.—Adult ♂ (wing 48.5 mm.) taken at Londa, Bombay Presidency, on January 13, 1938, by W. Koelz.

Topotypes.—13 specimens taken between January 8 and March 12, 1938.

This form has the back less yellow than the above, the color of the fore-

crown is generally restricted, and the hind-crown is greyer. There is a narrow greyish supercilium; the ear coverts are grey without buff.

Wing: 9 ♂ 47.5–51; 5 ♀ 43–48 mm.

Specimens from Mangalore on the Malabar Coast are nearest this form; from Nilambur intermediate with *sutorius*. Specimens from Cuddapah and Kodur, Madras Presidency, and from Mahendra Giri, Orissa, are nearest this form, with the crown as in the next.

Orthotomus sutorius guzurata (Latham).

I have five molting specimens from Udaipur, which is near the Guzerat border, the type locality, taken on April 22, 1937. The back has the yellow reduced; the crown is as in *sutorius*; there is a conspicuous whitish supercilium; the ear coverts are buffy.

Wing measurements: 5 ♂ 50–54; 4 ♀ 45.5–49.5 mm.

Four specimens from Sanchi, Bhopal, are very similar, and the measurements are included above.

Orthotomus sutorius sindiana, new subspecies.

Type.—Adult male (wing 51 mm.), Hyderabad, Sind, British India, April 28, 1937, collected by Walter Koelz.

Topotypes.—5 specimens taken near Khinjar Lake, Sind, February 11 to March 5, 1934, all in the University of Michigan Collection; one from Hyderabad, Sind, in my collection, taken April 28, 1937. The last is moulting to spring plumage.

This form has the yellow of the back more reduced, more green, than any of the preceding races; the color of the forecrown is more restricted and the hind neck is greyish, without the strong vinaceous wash of *londae*; the supercilium is absent or there is a greyish trace; the ear coverts are pearly grey; the under parts are slightly less buffy, with a tinge of grey.

Wing measurements: 5 ♂ 49–51; 3 ♀ 47.5–48 mm.

Orthotomus sutorius ruficapilla (Hutton) Simla.

I have seen specimens in the Rothschild and University of Michigan collections, in addition to my own, from Kashmir, Punjab (plains and foothills to 5000 feet), Saharanpur.

This is near *sindiana* in coloration but has the hindneck less grey and the ear coverts more buffy and has a longer wing: 13 ♂ 51–56.5; 4 ♀ 48–51 mm.

A specimen from Benares is nearest to the dull Bengal form *patia*.

Phylloscopus occipitalis kail, new subspecies.

Type.—Adult ♂ (wing 67 mm.) taken at Kail, Afghanistan, June 3, 1937, by W. Koelz.

Paratypes.—3 specimens from the type locality on the same date; one from Daulatshah, on June 1; two from Gumandru, on June 5; one from Sanglech, July 26; one from Iskarzir, on July 31, 1937.

Compared with winter specimens of *occipitalis* in my collection from the Eastern and Western Ghats, and breeding birds from Kashmir, Chamba,

and Lahul, this form has less green in the upper parts and duller edges to the primaries.

Wing measurements:

kail, 6 ♂ 64–67.5; 3 ♀ 59.5–62.5 mm.

occipitalis, 20 ♂ 64–70 mm., winter;

7 ♂ 62.5–68; 2 ♀ 59, 60 mm., summer.

***Prinia sylvatica palniensis*, new subspecies.**

Type.—♂ taken at Kodaikanal, Palni Hills, on March 12, 1937, by W. Koelz. Wing 52 mm.; tail 60.5 mm.

Paratypes.—A male (wing 52.5; tail 62 mm.), a female (wing 50; tail 58 mm.), from the type locality on about the same date; 2 males (wing 55, 56; tail 70, 69 mm.), and a female (wing 53; tail 61 mm.), from Oatacamund, Nilgiri Hills, taken February 15 and 16, 1937. These birds are all in winter plumage. One of the Palni males had begun molting.

Baker: New Fauna, gives the type locality as the Seegore Pass, Nilgiri Hills, which designation Whistler (J. B. N. H. S., XXXVI, p. 575) accepts. Jerdon (Madras Jour. Lit. Soc. Vol. XI, p. 4, 1840) says, however, in his description, "I have only seen this species *hitherto* . . . in the Seegore Pass . . .," and gives the wing measurement as 2.4 inches (61 mm.).

The bird of the Nilgiris is a small form, with a shorter wing than the bird of the lower elevations. Whistler gives for the birds of the Palkonda and Seshachalam Hills wing measurements of 12 ♂ 56–63.5; 2 ♀ 51.5–54 mm., and he includes (l. c., p. 721) the birds of Hyderabad State and Bombay Presidency (Nasik, Mahableshwar) with this form. I have seen specimens only from Sidhout, Madras Presidency, located in about the center of this range, and these fit Whistler's description.

It seems likely then that Jerdon's description refers rather to the race in the surrounding lowland than to the Nilgiri race, and the former may be considered typical *sylvatica*. *Palniensis* differs further from it in having a more conspicuous supercilium and a much smaller bill.

***Prinia sylvatica mahendrae*, new subspecies.**

Type.—♂ (wing 62 mm.) taken on Mahendra Giri, Orissa, January 24, 1937, by W. Koelz.

Topotypes.—2 males taken at about the same time.

Wing measurements: 60.5, 61 mm.

Compared with any of the other races of India, this is in winter plumage dark cinnamon brown, rather than grey-brown or fulvous, and it has a longer tail: 77, 79, 81 mm., as compared with 65–72.5 mm. for 12 ♂ of *sylvatica* (ex Whistler, l. c.). The underparts, especially the sides, are much greyer.

***Oriolus oriolus baltistanicus*, new subspecies.**

Type.—A female in first year plumage (wing 141.5 mm.) taken at Dagoni, Baltistan, on August 25, 1936, by W. Koelz.

Paratypes.—A juvenile from Skardo, August 15, 1936; two in first year

plumage, and one adult male from Shigar, August 19 to 21, 1936; one in first year plumage from Kapalu, August 28, 1936.

Compared with specimens of *kundoo* in my collection from Afghanistan (summer) and India (winter), the two adult males average less golden. The other specimens are in the early plumage that shows white below, streaked with black. These have much less yellow on the breast than *kundoo* in similar plumage, and the white is clearer, or greyer, with no buff. Above the tone is greener, less yellow.

Compared with *turkestanicus* in similar plumage (Shiburghan, Afghanistan, September 10, 1937, female, wing 154 mm.; Pitug, Ladakh, September 20 and 21, 1936, males, wing 160 mm.), this race is smaller, the underparts are whiter, and the upper parts are not so green.

Wing measurements:

baltistanicus, 7 specimens 134.5–146 mm.

kundoo, 29 specimens 133–147 mm.

***Temenuchus pagodarum afghanorum*, new subspecies.**

Type.—Adult ♂ (wing 109 mm.), taken at Tagau, Afghanistan, on June 8, 1937, by W. Koelz.

Paratypes.—4 specimens taken at Mamakhel, May 20 to 24, 1937; 3 from Chandau, on June 7, 1937.

Compared with breeding specimens in my collection of *pagodarum* from Nilambur (near the type locality="Malabar"), and from Cuddapah, Madras Presidency, these are more grey, less brown, and are generally paler, especially on the wing coverts and the outer vane of the secondaries. The pale edgings of the long feathers of the collar are more conspicuous. The wing averages longer. The distal white of the outer rectrix is generally less extensive.

Birds from the Kangra District in the Punjab Hills are most like this form, likewise two specimens from Udaipur.

From Lucknow I have four specimens that are dark grey, the darkest of any I have seen. A series from Londa, Bombay Presidency, is similar. For these birds Hodgson's *sylvestris* of Nepal is probably applicable.

Wing measurements:

afghanorum, 6 ♂ 107–113; 2 ♀ 103 mm.

pagodarum, 6 ♂ 102–109, 6 ♀ 98–100.5 mm.

***Lonchura striata estriata*, new subspecies.**

Type.—Adult female (wing 51 mm.), taken at Jagalbed, Bombay Presidency, on February 22, 1938, by W. Koelz.

Paratypes.—13 specimens from the vicinity of the type locality, taken January 8 to February 24, 1938, and one from Nilambur, Madras Presidency, March 2, 1937.

Wing measurements: 5 ♂ 53–55.5; 9 ♀ 51–57 mm.

Compared with specimens of typical *striata* from Ceylon in the Rothschild Collection this race has the head striping obsolete or nearly so, and that of the rest of the upper parts obsolescent; the brown of the upper parts,

throat, and breast has more admixture of black; the white is duller, with no creamy cast.

Compared with specimens of *acuticauda* of Nepal, there is no marking on the breast or sides; the tail coverts are nearly uniformly dark; central rectrices are not modified; the color is duskier.

Specimens from Mahendra Giri in Southern Orissa agree with Whistler's Vizagapatam series (Whistler, J. B. N. H. S. XXXVI, p. 384).

Specimens collected in late January and early February were breeding.

Chloris chloris smithae,¹ new subspecies.

Type.—Adult male (wing 91 mm.), taken at Balkh, Afghanistan, December 1, 1937, by W. Koelz.

Topotypes.—A male (wing 90.5 mm.) and 2 females (wing 88.5, 90 mm.) with the same data.

Compared with specimens of *turkestanica* from Syr Darya, Tashkent, and *bilkevitchi* from Askhabad in the Museum of Comparative Zoology, this form has the feathers of the back and breast in males more heavily tipped and with more of a brown, rather than grey. The yellow of the body is more olive. The yellow edges of the primaries average paler and at the scallop fade into a conspicuous white patch. The wing size is as in *bilkevitchi*.

Erythrina rubicilla eblis, new subspecies.

Type.—Breeding ♂ (wing 122 mm.), taken at Puga, Rupshu, Kashmir, on July 5, 1931, by W. Koelz.

Paratypes.—18 specimens from the Spiti River Valley, Spiti, Punjab, taken in September, 1933; 5 from the vicinity of the More Plain, Rupshu, taken in August, 1933.

Similar to typical *severtzovi* of which two pairs have been examined from the collection of the Field Museum of Natural History, taken July 3, 1925, on the Sanju River, Tam Karaul, Chinese Turkestan, the type locality as restricted by Hellmayr: F. M. N. H. Publ. 263, 1929, p. 47.

These birds are in relatively unworn plumage; the deep carmine edges that in the male come with wear are conspicuous only on the head. Comparing specimens in comparable plumage, the new form is generally darker, especially on wings and tail, and has longer wing and tail.

I have not seen specimens of *kobdensis* (Northwestern Mongolia), but from Sushkin's careful description (Proc. Boston Soc. Nat. Hist., Vol. XXXVIII, 1925, p. 13) it seems this form, while probably similar in color and tone, is smaller (wing measurements of 26 specimens ♂ 110–119; ♀ 107–111 mm.).

Wing measurements:

severtzovi, 2 ♂ 113, 115; 2 ♀ 107.5, 108 mm. ♂ (112) 115–117; ♀ 107–110 mm., ex. Sushkin.

eblis, 12 ♂ 119–123; 11 ♀ 111–117 mm.

¹ Named for my friend Miss Geneva Smithe.

Erythrina rubicilla diabolica, new subspecies.

Type.—Adult ♂ (wing 118 mm.), taken at Sanglech, Afghanistan, July 27, 1937, by W. Koelz.

Topotype.—adult female, July 26, 1937, wing 109 mm.

Compared with topotypical *severtzovi* in Field Museum of Natural History from Sanju River, Chinese Turkestan, and with typical *rubicilla* from the Caucasus in the Rothschild Collection, this form has a larger bill. It is intermediate in color between the two forms except that the males have the white spotting on the head restricted in extent as in *rubicilla*.

Hirundo rustica afghanica, new subspecies.

Type.—Breeding male (wing 128 mm.) taken at Baghlan, Afghanistan, July 1, 1937, by W. Koelz.

Paratypes.—An adult from the type locality on the same date; a juvenile from Mamakhel on May 23 and one from Laghman on May 25; an adult from Charakar on June 11; two adults and two juveniles from Gardez on June 15 and 16; two juveniles from Baghlan on July 1; a juvenile from Girishk on October 27.

Wing measurements of adults: 3 ♂ 119–128; 3 ♀ 119–124 mm.

Similar to typical *rustica* except that the underparts and under wing coverts and axillaries are paler, as in *gutturialis*.

I should assume that my specimens had faded were not birds from Sind in fresh plumage taken in January, along with specimens of *gutturialis*, just as pale.

Anthus hodgsoni burzil, new subspecies.

Type.—Breeding male (wing 85 mm.), taken on August 5, 1936, on Burzil Pass on the edge of the Deosai Plain, Kashmir, by W. Koelz.

Paratypes.—3 adults and a juvenile from the same locality on the same date; a breeding female from Pukar, Lahul, taken June 23, 1936; a breeding male from Koksar, Lahul, taken July 23, 1930.

These birds are in dull breeding plumage from which most of the green has faded, but they show one character that separates them from typical *hodgsoni*, the winter resident of the lower Himalayas (Kulu, Darjiling), and from *inopinatus*, the winter resident of India (Nilgiris, Bombay Presidency); i. e., the bill is much heavier. They agree with the former in being heavily streaked above.

Motacilla maderaspatensis kangrae, new subspecies.

Type.—Adult ♂ (wing 97.5 mm.), taken at Bhadwar, Kangra District, Punjab, April 25, 1933, by W. Koelz.

Paratypes.—16 specimens in the collection of the University of Michigan Museum: from Bajaura, Kulu, and Bhadwar in the Kangra District; from Lahore; from the Hissar District, all in the Punjab; from Rampur State, Simla Hills.

Compared with specimens of typical *maderaspatensis* from South India and Ceylon in my collection and the Rothschild Collection, this form never has

the upper parts so deep black, and the sides have less of a sooty wash. The tail is shorter.¹

Wing measurements:

kangrae, 12 ♂ (92) 95–100.5; 5 ♀ 91 (94) mm.

maderaspatensis, 9 ♂ 99–101.5 (106); 6 ♀ 92.5–97.5 mm.

Tail measurements:

kangrae, 12 ♂ (91) 95–102; 5 ♀ 90–96 mm.

maderaspatensis, 6 ♂ 99–103 (107); 6 ♀ 98.5–103 mm.

Mirafraga cantillans bangsi, new subspecies.

Type.—Adult ♂ (wing 86 mm.), taken March 25, 1937, at Hospet, Madras Presidency, by W. Koelz.

Topotypes.—3 specimens with the same data.

Ruddier than *cantillans* of Bengal, throughout.

Wing measurements: 2 ♂ 81, 86; 2 ♀ 82 mm. (all birds moulting).

Galerida malabarica propinqua, new subspecies.

Type.—Breeding ♂ (wing 95 mm.), taken at Londa, Bombay Presidency, on February 5, 1938, by W. Koelz.

Topotypes.—20 specimens taken between January 11 and March 5, 1938.

Compared with topotypical *malabarica* in my collection from Tellicherry and Mangalore, taken February 25 and March 1, 1937, this race is less ruddy everywhere below and on the back. The wing is perhaps a little shorter and the bill of lighter weight. I have a juvenile of each race, and the color differences are evident on comparing them.

Wing measurements:

propinqua, 10 ♂ 94–99.5; 10 ♀ 89.5–93 mm.

malabarica, 3 ♂ 97–100; 2 ♀ 89 mm.

Specimens taken in early January were breeding and a full-fledged young was taken on January 27.

Zosterops palpebrosa remota, new subspecies.

Type.—Male (wing 55.5 mm.) taken at Jalalabad, Afghanistan, on December 18, 1937, by W. Koelz.

Topotypes.—5 specimens taken on the same date.

Similar to a series of *occidentis*¹ from Punjab in collection of the University of Michigan, but is greener above and somewhat darker below.

Wing measurements:

remota 4 ♂ 55–57; 2 ♀ 54, 58 mm.

occidentis, 7 ♂ 54–59, 4 ♀ 53–57 (Punjab hills).

Zosterops palpebrosa palniensis, new subspecies.

Type.—Male (wing 54 mm.) taken at Kodaikanal, Palni Hills, March 1, 1937, by W. Koelz.

Topotypes.—4 specimens taken on the same date.

¹ If Baker's restriction of the type locality of *palpebrosa* to Orissa is valid, then *occidentis* is probably a synonym of *palpebrosa*.

Wing measurements: 3 ♂ 54–56; 2 ♀ 54, 55.5 mm.

Compared with topotypical specimens of *nilgiriensis* in my collection, the Palni Hills race is much less yellow, more green above and duller on the throat. The bill is larger.

It differs from *egregia* of Ceylon in the same way and is, in addition, much greyer below.

I have specimens from Londa, Bombay Presidency, that are probably *salimalii*. These differ from *nilgiriensis* in about the same way as *palniensis* differs from *nilgiriensis*, so that the contrast between *palniensis* and *salimalii* is pronounced.

Arachnothera longirostra vantynei, new subspecies.

Type.—Breeding male (wing 66 mm.) taken at Jagalbed, Bombay Presidency, on March 4, 1938, by W. Koelz.

Paratypes.—3 females taken in or near the type locality from March 2 to 6, 1938.

Wing measurements: 57–60 mm.

The Rothschild Collection has a female from North Cachar, which may be considered topotypical of *longirostra* and four other specimens from Malaya. These differ from my specimens in having a larger bill and in being more green above and below, especially on the breast.

Piprisoma agile saturator, new subspecies.

Type.—Adult male (wing 62 mm.), taken at Londa, Bombay Presidency, on February 9, 1938, by W. Koelz.

Topotypes.—12 specimens taken from January 11, to March 12, 1938.

Compared with specimens of *agile* in my collection and that of the University of Michigan Museum, from Sanchi in Bhopal and from Punjab, these birds are darker and have stronger pectoral striping. The wing averages shorter.

Wing measurements:

saturator, 7 ♂ 55.5–62; 6 ♀ 58.5–62 mm.

agile, 12 ♂ 61–65; 8 ♀ 59–64 mm.

Two Nilgiri males measure 63 mm. They are dark like *saturator*. Jerdons *vireoides* (Madr. Jour. Lit. Sci. XI, 1840) probably came from the Eastern Ghats.

Birds taken in late February were breeding.

Pitta brachyura pulchra, new subspecies.

Type.—Adult ♂ (wing 109 mm.), taken at Bhadwar, Kangra, Punjab, May 15, 1933, by W. Koelz. U. M. M. Z. No. 77452.

Topotype.—Male (wing 106 mm.), taken May 12, 1933, in the same collection.

Compared with specimens of *brachyura* from Ceylon in the Rothschild Collection, and from Malabar and Londa, Bombay Presidency, in my collection, this race is generally paler; the lateral crown streaks are greyer, less brown; the back is purer green, less brown.

Brachypternus benghalensis woodi,¹ new subspecies.

Type.—Female (wing 148 mm.), taken at Jagalbed, Bombay Presidency, on February 23, 1938, by W. Koelz.

Topotypes.—13 specimens taken in or near the type locality between January 27 and March 5, 1938.

Wing measurements: 7 ♀ 147–153; 7 ♀ (139) 145–150 mm.

This race agrees with *tehminae*, of which I have a specimen from Mangalore, in having the rump and wing extensively clouded with the color of the back, the shoulder spotting obsolescent, the underparts stained. It differs from that form and from all the other forms of peninsular India in having the yellow of the back strongly tinged with red, and in having the feathers of the neck between the throat and breast unspotted or with the white much reduced. These characters are strongest in evidence in females. The crown spotting in these tends also to be reduced in quantity.

Chrysocolaptes guttacristatus socialis, new subspecies.

Type.—Adult male (wing 151 mm.) taken at Jagalbed, Bombay Presidency on February 22, 1938.

Topotypes.—10 males and 8 females taken between January 14 and March 12, 1938.

Whistler (J. B. N. H. S. XXXVII) shows that the name *chersonesus* is applicable to the race of this woodpecker found in South India. My specimens from Bombay Presidency, however, do not agree with Malayan *chersonesus* Kloss (Singapore I.). Compared with Malayan birds in the Rothschild Collection the new race is more olive, less golden on the back, especially in males; the red crown of males is duller; the brown of the forehead in both sexes is more extensive; the white spots of the crown in females average smaller. The size is about the same as my *chersonesus* but not like Kloss' measurements of 142–150 mm. Wings of ten males of *socialis* measure 151–159; eight females 152–162 mm.

Xantholaema haemacephala confusa, new subspecies.

Type.—Breeding ♂ (wing 81 mm.), taken at Londa, Bombay Presidency, January 18, 1938, by W. Koelz.

Topotypes.—7 specimens taken January 11 to 23, 1938.

Whistler (B. N. H. S. J. XXXVII, p. 517) is apparently right in considering *lutea* of Pondicherry a synonym of *indica* of Bengal. My specimens from Bengal, U. P., Punjab (plains and foothills), East Madras, and the Nilgiris, virtually all winter birds, are similar. I find, however, that at Londa occurs a race that is much less yellow throughout. The back is rather grass-green than yellow-green, the throat is paler, and the breast and belly have the yellow wash much reduced. The streaking of the under parts is darker.

Two specimens from Kodur, Madras Presidency, are intermediate, and two from Patna, Bihar, are near this form.

Wing measurements: 3 ♂ 80–82.5; 5 ♀ (72) 77.5–80 mm.

¹ Named for my friend Norman A. Wood.

Alcemerops athertoni brevicaudata, new subspecies.

Type.—Male (W 131, T 123 mm.), American Mus. N. H. No. 642636, taken January 2, 1904, at Cheteriana, Hainan, Katsumata Coll.

Paratypes.—5 males and 8 females from various Hainan localities, taken chiefly in September (fresh plumage) and January.

Compared with winter specimens from the Nilgiris, Bombay Presidency, and Darjeling, the new form has the tail shorter, the brown on the belly richer, the azure on the beard more conspicuous, and more yellow in the plumage green.

Tail measurements:

athertoni, 3 ♂ 137–141.5; 3 ♀ 129–137.

brevicaudata, 5 ♂ 123–130; 7 ♀ 125–128 (132) mm.

Ceryle rudis afghanistanica, new subspecies.

Type.—Adult female (wing 139 mm.) taken May 26, 1937, at Laghman, Afghanistan, by W. Koelz.

Topotypes.—two females on the same date.

Wings: 142, 146 mm.

Compared with a pair of *leucomelanura* (wing ♂ 132.5, ♀ 135 mm.) from Ceylon in the Rothschild Collection, the Afghan specimens have broader white edgings to the dark feathers, the dark feathers have a blue-grey cast, the dark pectoral spots are weaker and less extensive, the bill averages shorter and the wing longer. There is, on the average, less black on the secondaries, especially on the inner web.

Seven specimens from Londa, Bombay Presidency, appear to be nearest the typical form in color. Nine specimens from Sind and seven from Punjab in the University of Michigan Collection are nearest this form. The wings however, average shorter;

Wing measurements:

Sind, 9 specimens 134–139 mm.;

Punjab, 3 ♂ 134–138; 4 ♀ 135.5–141.5 mm.

Tockus birostris pergriseus, new subspecies.

Type.—Female (wing 203 mm.) taken February 13, 1933, at Lahore, Punjab, by W. Koelz. U. M. M. Z. No. 82256.

Compared with specimens in my collection from Saba and Hospet in Madras Presidency, and Londa in Bombay Presidency, and from Nepal and Bengal in the Rothschild Collection, this bird is much less brown, especially on the wing coverts, and the grey is deeper. The bill measured from the nostril to the tip is shorter.

Bill measurements:

pergriseus, ♀ 63 mm.

birostris, ♀ 69.5, 74, 71, 75 mm.; ♂ 92, 82.5, 81, 87, 71 mm.

Harpactes fasciatus legerli, new subspecies.

Type.—Adult ♂ collected in the forests at the foot of Mahendra Giri, Orissa, on January 22, 1937, by W. Koelz.

Differs from *malabaricus* in my collection from Londa, Bombay Presidency, the Malabar Coast, and the Nilgiris, in being paler, especially on the back and in having the white of the wing barring more extensive. The wing may average longer. In the single specimen it measures 130.5 mm., while in 20 specimens from the Western Ghats only one has so long a wing.

Caprimulgus asiaticus gurgaoni, new subspecies.

Type.—American Museum of Natural History No. 633103, male, Hattin, Gurgaon, Cleveland Coll.

Paratypes.—3 specimens in the same collection with the same locality data.

Wing measurements: 146, 148, 153 mm.

Compared with birds from South Canara, Malabar, South Orissa, and Sidhout in Madras Presidency, the Punjab birds are very much paler throughout. Typical *asiaticus* of Peninsular India appears to be distinguishable from *minor* of Ceylon only in having on the average a longer wing. *Siamensis* is also a smaller form.

Tyto alba crypta, new subspecies.

Type.—Male (wing 297 mm.), taken at Londa, Bombay Presidency, January 26, 1938, by W. Koelz.

Topotypes.—A male (262 mm.) and a female (293 mm.) taken at about the same time.

Compared with the type and the series of cotypes of *stertens* in the Rothschild Collection, the new form is darker. It differs from *javanica* in being greyer above; the brown is duller throughout; the white spots are smaller and the reticulation is probably finer.

Otus bakkamoena stewarti,¹ new subspecies

Type.—Adult male (wing 163 mm.), taken at Baijnath, Kangra District, Punjab, on January 16, 1933, by W. Koelz, U. M. M. Z. No. 76261.

Paratype.—adult male from Bhadwar, May 7, 1933, wing 160 mm.

Compared with *plumipes* from 8000 feet altitude in the same district, this form is paler and strongly washed tan throughout. On the underparts the dark markings are greatly reduced, the shaft streaks are narrower, and the barring is broken into dots, much as in *O. brucei* or *O. b. lempiji*. The toes are nearly bare.

It is very like *lempiji* of Siam but *lempiji* is tawnier.

Compared with specimens of *deserticola* from Sind, the latter is much paler, especially below; the markings of the underparts more distinct. The black tipping to the feathers of the throat is especially conspicuous.

Aegolius funerea juniperi, new subspecies.

Type.—Breeding female (wing 184 mm.), taken at Kyelang, Lahul, Punjab, on June 18, 1936, by W. Koelz.

Paratype.—feathered juvenile ♀ taken at Jurnat, Lahul, on June 23, 1936.

¹ Named for my friend R. E. Stewart.

The tone of coloration is deep hair-brown as in *richardsoni*, much deeper than in *tengmalmi* (juvenile and adult). It differs from *richardsoni* in having (1) whitish, nearly unmarked feet, (2) the abdomen barred, not streaked, (3) a much larger white patch on the ear ruff, (4) the spots of the crown and primaries and the ears duller, not clear white, (5) the scapular spotting less conspicuous, (6) the under tail coverts less streaked.

The juvenile, compared with a juvenile of *richardsoni* from New Brunswick in the collection of Mr. Hoyes Lloyd of Toronto, is darker and duller, rather hair-brown than Van Dyke brown.

Magna is a much larger and paler race with much more white in the plumage.

Buturlin and Dementiev (*Systema Avium Rossicarum*, 1935) say that all the Asiatic forms, except *caucasicus* (Caucasus) and *beickianus* (North Kansu) have a greyish tone. The exceptions are described as having a dark ground color, probably like *juniperi*, but from the descriptions available other characteristics appear different.

The species has, so far as I know, not been recorded previously from the Indian Empire.

***Streptopelia orientalis sylvicola*, new subspecies.**

Type.—Breeding male (wing 185 mm.), taken at Castle Rock, Bombay Pres., March 6, 1938, by W. Koelz.

Topotypes.—4 males and two females taken from March 5–8, 1938.

Compared with specimens of *agricola* from Upper Assam and Tenasserim in the Rothschild Collection, these specimens are similar in coloration, but the wine cast of the under parts is dull, with a light rusty wash, and where in *agricola* the color extends nearly evenly over the underparts, it is deepest in this race in the crop region. The back in this race is darker. The females show the differences more strikingly.

Wing measurements: 5 ♂ 176–185; 2 ♀ 173, 175 mm.

***Pterocles orientalis bangsi*, new subspecies.**

Type.—Breeding ♂ (wing 225 mm.) taken with a juvenile near Tolokhan, Afghanistan, on August 28, 1937, by W. Koelz.

Paratypes.—An adult female and a female in first plumage taken in the type locality on the same date; a male at Ikatut on August 24, 1937; and one at Balkh on September 5, 1937.

Compared with specimens of *orientalis*: winter migrants to Punjab in the University of Michigan Collection, and with winter birds from Syria, Tunis, and Russian Turkestan, and breeding birds of Russian and Chinese Turkestan, Persia, and Algeria in the collections of Mr. H. B. Conover and U. S. National Museum, and the Rothschild Collection, the male of this form has the spotting of the back and the edgings of the wing coverts more yellow, less ochraceous buff. The general tone of the ground of the back is paler, less black. The female is also paler with less black in the barring of the back and with a broad yellowish wash on the ends of many of the feathers.

Wing measurements: 3 ♂ 224–228; ♀ 235 mm.

Koslovae is described as differing from *orientalis* by paler breast in the female; *enigmaticus* by darker breast and also upper parts.

***Syrhaptus tibetanus pamirensis*, new subspecies.**

Type.—Male (wing 267 mm.), taken in June, Akbaital R., Pamirs, Am. Mus. Nat. Hist., No. 547727.

Topotype.—a female with the same data. Wing 260 mm.

Compared with a large series of topotypical specimens from Ladakh in the American Museum of Natural History and in my collection, among them 12 birds taken in late June and early July, the new race has a paler ground color and the broad tipping of the wing coverts is much paler. The breast is virtually white, not washed with buff. The black bars on the rectrices are narrower and there is more white on the tips. The light area on the inner webs of the inner primaries is more extensive.

***Burhinus oedicnemus mayri*, new subspecies.**

Type.—Adult ♂ (wing 226 mm.), taken at Londa, Bombay Presidency, on January 26, 1938, by W. Koelz.

Topotypes.—5 specimens taken from January 20 to March 12, 1938.

Compared with specimens of *indicus* in the Rothschild Collection from Ceylon and Agra, these specimens are much more deeply colored, especially on the breast, neck, and under tail coverts, much as in *oedicnemus*. The brown of the back and crown is darker and the black streaking is heavier. The white of the wing coverts is duller and more restricted.

Wing measurements:

mayri, 2 ♂ 210, 226; 4 ♀ 208–217.5 mm.

indicus, 15 specimens 205–220 (225), ex Hartert.

A female taken on March 12 was incubating.

***Lobivanellus indicus lankae*, new subspecies.**

Type.—Male (wing 209 mm.), taken at Galgamuwa, Ceylon, on September 16, 1922, by D. E. Goonewardine; U. M. M. Z. No. 63888.

Paratypes.—one specimen from the same place, and one from "Ceylon" in the Michigan University Collection, and one from "Ceylon" in the Rothschild Collection.

Compared with eight topotypical specimens of *indicus* in my collection from Londa, Bombay Presidency, on the Goa frontier, this form has a much shorter wing; the black of the hind neck extends farther toward the body; the vinous cast of the back is stronger.

Wing measurements:

lankae, 3 ♂ 201–209; ♀ 204 mm.

indicus, 4 ♂ 218–229; 4 ♀ 212–232 mm.